

REMARKS

Claims remaining in the present patent application are numbered 1-17. The rejections and comments of the Examiner set forth in the Office Action dated April 23, 2007 have been carefully considered by the Applicant. Applicant respectfully requests the Examiner to consider and allow the remaining claims.

Telephone Conference

Applicant wishes to thank the Examiner for clarifying issues related to the drawings in a telephone conference held between Mr. Lin C. Hsu and Examiner Ramnandan Singh on or about July 8, 2007. In particular, Examiner Ramnandan indicated that a label for block 8 and text describing the connections 1, 2, and 3 should be included in order to overcome the objections.

Drawings

The present Office Action objected to the drawings because the legends explaining the reference numerals used in FIGS. 1 and 2 are not provided. Although the drawings were in violation of no cited rules or statutes, the Applicant has herein submitted replacement sheets that include a label for block 8 and text describing connections 1, 2, and 3 in FIGS. 1 and 2 as suggested by the Examiner by telephone conference describe above. As such, the

objections to FIGS. 1 and 2 should be withdrawn, and Applicant respectfully requests re-consideration of FIGS. 1-4 in the above captioned patent application.

35 U.S.C. §102 Rejection

The present Office Action rejected Claims 1-5, 7-15, and 16-17 under 35 U.S.C. 102(b) as being anticipated by Vanderbauwhede et al. (European Patent Application No. EP 1-107-464-A1). Applicant has reviewed the above cited reference and respectfully submits that the present invention as recited in Claims 1-17, is neither anticipated nor rendered obvious by the Vanderbauwhede et al. reference.

Independent Claims 1 and 9

Applicant respectfully points out that independent Claims 1 and 9 each recite that the present invention includes, in part:

. . . a variable simulation device coupled to at least one circuit section of the at least one bridge branch, the variable simulation device configured to simulate the at least one circuit section of the at least one bridge branch and to balance the bridge circuit, wherein the at least one bridge branch comprises at least three circuit sections for balancing . . . (Emphasis Added)

The present invention pertains to a bridge circuit for echo suppression for a reception signal of a communication device connected to a transmission line. In particular,

independent Claims 1 and 9 recite that a bridge branch in the bridge circuit comprises at least three circuit sections used for balancing.

Applicant respectfully notes that the prior art reference, Vanderbauwhede et al., does not teach nor suggest the bridge circuit that comprises in particular, the variable simulation device that is coupled to at least one circuit section of at least one bridge branch, wherein the bridge branch comprises at least three circuit sections used for balancing, as claimed in independent Claims 1 and 9 of the present invention. "A prior art reference must disclose every limitation of the claimed invention, either explicitly or inherently, to anticipate." *Telemac Cellular Corp. v. Topp Telecom, Inc.*, 247 F.3d 1316, 1327, 58 USPQ2d 1545 (Fed. Cir. 2001) (citing *In re Schreiber*, 128 F.3d 1473, 1477, 44 USPQ2d 1429, 1431 (Fed. Cir. 1997)). Because the Vanderbauwhede et al. reference does not disclose or describe, explicitly or inherently, each of the limitations of independent Claim 1, the Vanderbauwhede et al. reference does not anticipate independent Claims 1 and 9.

In contrast to independent Claims 1 and 9 of the present invention, the Vanderbauwhede et al. reference discloses an echo canceller including a hybrid 5 and a digital control means 4, such as a microprocessor, in FIGS. 1-3. In particular, the Vanderbauwhede et al. reference

discloses a bridge circuit which essentially corresponds to the conventional bridge circuit in double form of FIG. 4, described in the specification of the present invention. As such, echo cancellation is provided for both pins 15a and 16a of the input signal. The microprocessor 4 controls the balancing of the bridge circuit, which corresponds to the adjustment of a two part circuit (e.g., Z2 and Zb) in one of the corresponding branches of the bridge circuit.

The Vanderbauwhede et al. reference adjusts tunable passive elements such as resistors, capacitors, or inductors in impedance Zb. The values for the passive elements are selected by microprocessor 4 for balancing Z2 and Zb for a particular branch of the bridge circuit. As such, the Vanderbauwhede et al. reference discloses a two part circuit (Z2 and Zb) that is tunable for a corresponding branch of a bridge circuit.

The present invention, on the other hand, discloses a bridge circuit for echo suppression that includes a variable simulation device that is coupled to at least one bridge branch. The variable simulation device is configured to simulate at least one circuit section of the bridge branch. Distinctively, the bridge branch comprises three circuit sections for balancing.

That is, in contrast to conventional circuits and the tunable circuit in Vanderbauwhede et al. reference which disclose two circuit sections (e.g., Z2 and Zb) in a branch for balancing, embodiments of the present invention disclose a bridge branch of a bridge that includes three circuit sections (e.g., Z3, Z4, and Z5) for balancing, as recited in independent Claims 1 and 9. In particular, FIG. 1 discloses an additional simulation stage that includes the variable simulation device 8 that is coupled to at least one circuit section (e.g., Z5) of a bridge branch. The simulation device 8 simulates the additional circuit section of the bridge branch, in this case Z5, through a balancing parameter "k". The voltage drop over Z5 is partitioned to balance the bridge circuit. As such, distinct from the Vanderbauwhede et al. reference, a bridge branch of the present invention includes three circuit sections (e.g., Z3, Z4, and Z5) that are used for balancing.

Thus, Applicant respectfully submits that the present invention as disclosed in independent Claim 1 is not anticipated by the Vanderbauwhede et al. reference, and is in a condition for allowance. In addition, Applicant respectfully submits that Claims 2-8 which depend from independent Claim 1 are also in a condition for allowance as being dependent on an allowable base claim.

Similarly, Applicant respectfully submits that the present invention as disclosed in independent Claim 9 is not anticipated by the Vanderbauwhede et al. reference, and is in a condition for allowance. In addition, Applicant respectfully submits that Claims 10-17 which depend from independent Claim 9 are also in a condition for allowance as being dependent on an allowable base claim.

35 U.S.C. §103 Rejection

The present Office Action rejected Claims 6 and 15 under 35 U.S.C. 103(a) as being unpatentable over Vanderbauwhede et al. reference. Applicant has reviewed the above cited reference and respectfully submits that the present invention as recited in Claims 6 and 15 is neither anticipated nor rendered obvious by the Vanderbauwhede et al. reference since they depend on allowable base Claims 1, 9, respectfully, as previously discussed. As such, dependent Claims 6 and 15 are in a condition for allowance as being dependent on allowable base claims 1 and 9.

CONCLUSION

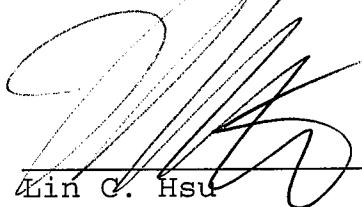
In light of the amendments and arguments presented herein, Applicant respectfully requests reconsideration of the rejected Claims for allowance thereof.

Based on the arguments presented above, Applicant respectfully asserts that Claims 1-17 overcome the rejections of record. Therefore, Applicant respectfully solicits allowance of these Claims.

The Examiner is invited to contact Applicant's undersigned representative if the Examiner believes such action would expedite resolution of the present Application.

Respectfully submitted,

Holme Roberts & Owen LLP



Date: 23 July 2007

Lin G. Hsu  
Reg. No.: 46,315  
299 South Main Street  
Suite 1800  
Salt Lake City, Utah 84111